

What is claimed is:

1. A method of manufacturing a sheet material, in which a plated film is formed on a surface of a conductive foil provided with a mask, said surface being exposed at exposed parts of the mask, comprising the step of:
  - covering the conductive foil with a clamper so as to cover at least the exposed parts of the surface thereof;
  - injecting a plating liquid into the interior of the clamper; and
  - forming the plated film on the surface of the conductive foil at said parts exposed at the mask.
2. The method of manufacturing the sheet material according to claim 1, wherein the mask is a resin film made of an insulating resin.
3. The method of manufacturing the sheet material according to claim 2, wherein the resin film is a thermosetting resin.
4. The method of manufacturing the sheet material according to claim 3, wherein the resin film is formed by heating and compressing a prepreg sheet.
5. The method of manufacturing the sheet material

according to claim 3, wherein the resin film is formed by adhering the thermosetting resin via a screen-printing.

6. The method of manufacturing the sheet material  
5 according to claim 1, wherein the mask is formed with a metal.

7. The method of manufacturing the sheet material  
according to claim 1, wherein the exposed parts are parts  
10 becoming die pads or bonding pads.

8. The method of manufacturing the sheet material  
according to claim 1, wherein the plated film is formed  
by an electroplating method.

15

9. The method of manufacturing the sheet material  
according to claim 1, wherein principal materials of the  
plated film are Ag, Pd or Au.

20 10. The method of manufacturing the sheet material  
according to claim 1, wherein the conductive foil and the  
clammer form one hermetically sealed space.

11. The method of manufacturing the sheet material  
25 according to claim 1, wherein the conductive foil is

provided with a plurality of blocks which contain a plurality of mounting portions forming circuit devices.

12. The method of manufacturing the sheet material  
5 according to claim 11, wherein the clamper simultaneously presses the plurality of blocks of the conductive foil at peripheral parts thereof.

13. The method of manufacturing the sheet material  
10 according to claim 11, wherein the plated films are simultaneously formed by the clamper on the exposed portions of the conductive foil containing a plurality of blocks.

15 14. The method of manufacturing the sheet material according to claim 1, wherein the clamper has injection means and evacuation means, and a plating liquid is injected into the interior of the clamper by the injection means, while the plating liquid is evacuated outside of the clamper  
20 via the discharge means.

15. The method of manufacturing the sheet material according to claim 1, wherein the exposed portion of the mask is formed by selectively carrying out a laser etching  
25 on the mask.

16. A method of manufacturing a sheet material, in which plated films are formed on one sheet of a continuous conductive foil,

wherein one surface of the conductive foil is pressed  
5 by a clamper to form spaces on the conductive foil, and a plating liquid is injected inside the spaces to form the plating films.

17. A method of manufacturing a circuit device,  
10 comprising the steps of:

forming predetermined patterns through a half-etching;

disposing a clamper so that spaces can be formed on the pattern of a conductive foil or sheet material;

15 injecting a plating liquid into the spaces formed inside the clamper;

forming plated films at said plate-forming portions;  
and

fixing semiconductor chips or/and electrical  
20 connection means on the plated films.

18. The method of manufacturing the circuit device according to claim 17, wherein the clamper is provided with injection means and evacuation means of the plating  
25 liquid, and the plating liquid existing in the spaces is

fluidized.

19. The method of manufacturing the circuit device according to claim 17, wherein the mask is a metal or a  
5 resin exhibiting corrosion resistance against the plating liquid.

20. A method of manufacturing a circuit device, comprising the steps of:

10 preparing a conductive foil or a sheet material which is formed with masks in such a manner as to surround electrical contact parts of the semiconductor elements;  
holding the conductive foil or the sheet material by a clamper so that spaces are formed on the electrical  
15 contact parts; and  
forming plated films on said electrical contact parts.

21. The method of manufacturing the circuit device  
20 according to claim 20, wherein said conductive foil or the sheet material is formed in convex shape by half-etching patterns composing said electrically contacting parts.

22. The method of manufacturing the circuit device  
25 according to claim 17, further comprising the step of

preparing a conductive foil or a sheet material provided with masks so that plate-forming parts which compose the patterns are exposed.